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but upon the whole they were not remarkable on the score of brightness. I should imagine it will be very difficult to identify any number of them at two or more stations.

Mr. Bishop, who carefully watched the meteoric shower at Weymouth, fixed upon 13^{h} local time for the maximum; this estimation, corresponding to $13^{h}\ 10^{m}$, Greenwich time, is in close agreement with the result obtained at Twickenham. At Weymouth some of the meteors had the characteristics of fireballs, leaving long trains of a greenish colour. The display commenced at $11^{h}\ 20^{m}$. Mr. Bishop was informed by Lieut. Baker, of H.M.S. *Lord Clyde*, in Portland Roads, that all the meteors appeared to him to radiate from a centre 20° above the horizon, and due east (for maximum time), which he also considered to be 13^{h}. In Malta Harbour, on board H.M.S. the *Prince Consort*, the maximum was judged to have taken place at $14^{h}\ 15^{m}$ local time, or at $13^{h}\ 19^{m}$ mean time at Greenwich.

Accounts of the Meteors of 1866, November 13–14, were also received from—

Mr. J. Birmingham, at Milbrook, Tuam. The position of a starlike and stationary meteor in about R.A. $10^{h}\ 2^{m}\ 30^{s}$ and N.P.D. 69° 28′, is referred to as seeming to mark the radiant-point. The number of meteors counted up to $12^{h}\ 50^{m}$ was 1500, but from that time the counting could no longer be depended upon. The meteors are described as having the nuclei generally red or deep orange, while the tails were greenish or bluish, and often left a line of vapour in their place after their extinction. In one instance this smoky streak began instantly to move sideways at right angles to its motion when luminous; and in another, where it formed a considerable mass, it curled up in a crescent that for a short time continued its forward course very slowly and then as slowly retrograded; it was observed plainly for half-an-hour, and might have been visible longer.

The Rev. A. W. Deey, Alton, Hampshire. The number of meteors as counted by himself and a friend, on the north and south side of a great circle through the zenith and the head of *Leo* were—

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	from 1^h to $1^h\ 5^m$	$1^h\ 10^m$ to $1^h\ 15^m$
On south side	219	265
On north side	137	220
	356	485

	from $1^h\ 40^m$ to $1^h\ 45^m$
On south side	85
On north side	56
	141

Two meteors occurring at $1^h\ 20^m$ and $1^h\ 26^m\ 5^s$ are particularly noticed.

Mr. V. Fasel, at Dr. Wrigley's Observatory, Clapham. The meteors were observed on the nights of November 12 and 13. The following table shows the numbers seen in successive half-hours:—

November 12, from	6 0	to	11 0 P.M.	7
	11 0	,,	11 30	9
	11 30	,,	12 0	12
November 13, from	0 0	,,	0 30 A.M.	73
	0 30	,,	1 0	263
	1 0	,,	1 30	724
	1 30	,,	2 0	394
	2 0	,,	2 30	61
	2 30	,,	3 0	56
	3 0	,,	3 30	22
	3 30	,,	4 0	32
	4 0	,,	4 30	34
	4 30	,,	5 0	12
	5 0	,,	5 30	9
				1708

the estimated number being about four times as many. The characteristics of the maximum display are stated to be as follows:—

1. The general direction of the meteors was from east to west. Those which originated east of the radiant point moved from west to east. The radiant point was about the centre of the "sickle" in *Leo*.

2. The meteoric trains of light were remarkably brilliant, and many of them of the shape of a spindle or as the vibrating of a string, being brighter in the middle of their path.

3. The greater number of the meteors were very bright, and in some instances as large as the planet *Jupiter*. Their colour was yellow, orange, and sometimes red, while the luminous paths were of an emerald green or bluish hue, though in some cases red.

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4. The trains were of two kinds; either of a continuous line of light, or presenting the appearance of a luminous dust or sparks.

5. The duration of the appearance of the trains was, both in the east and west, from 2 to 14 seconds, in a few instances longer.

6. The longest and most brilliant trains were towards the west, varying from two to twenty degrees in length. Those in the east were comparatively short, about two or three degrees, but the duration of their appearance was quite as long as that of the former.

The author directs attention to the fact that after 2^h a.m. and after *Leo* had got up pretty high above the horizon, the meteors seen by him from that time, though apparently originating from the same radiant-point, took a different course, mostly tracing their trajectories from S.S.E. to N.N.W. and N. by W. as it were towards the direction of the Magnetic Pole.

Mr. Fasel's paper was accompanied by an elaborate tabular account of 89 of the most remarkable meteors observed on the night of the 13th.

The Rev. F. Howlett, Hurst Green, Canterbury. The number of meteors fairly counted by himself and a companion from $11^h\ 54^m$ p.m. to $2^h\ 40^m$ a.m. was upwards of 5600. The numbers at the highest period, the eight minutes from $1^h\ 2^m$ to $1^h\ 10^m$ a.m., averaged 200 per minute. No meteors were observed of any unusually great size. The colours of the nuclei were mostly *bluish white* tint, except when near the horizon they appeared of an orange or ruddy tint. The *trains* were generally of a *greenish-white hue*, except for the last two degrees or so, which at the moment of explosion assumed a ruddy appearance. The author refers to a list of *paths* submitted by him to the "Committee for the Observation of Luminous Meteors," in connexion with the British Association.

Mr. S. Hunter, at Sandy Cove, Kingstown, Dublin. The author was assisted in the observations by three friends, and he has recorded in a tabular form the particulars of 22 of the most remarkable meteors, and remarks. During a portion of the time in which the meteors were most brilliant he paid particular attention to the "Radiant Point," and thought it very near the intersection of a perpendicular dropped from ζ *Leonis* to a line joining γ with the star marked x by the B.A. Maps.

Mrs. Hannah Jackson, at Brompton. Number of meteors counted from $11\frac{3}{4}^h$ p.m. to 2^h a.m. 776.

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Rear-Admiral Eras. Ommaney, at Paddington. The Radiant Point is described as developing itself in a most remarkable degree of accuracy; soon after the commencement of the shower, about the centre of a trapezium of stars, on the "sickle" in *Leo*, two distinct flashes were observed without any path or lateral motion, and around this point the meteors seemed to emerge with longer or shorter paths, according to the distance of their emergence from the radiant point. At about 1 a.m. a remarkable phenomenon was observed on the radiant-point in the shape of a bright golden-coloured flash, having a zigzag form, the extent limited to about 1° in arc, and visible for a second in time.

Mr. Taunton, at Ashley, near Stockbridge, Hampshire. Meteors counted, 1420 in 2½ hours. Some appeared only as a ball, without a track or train; many were small and faintly visible; many large, silvery and of slower pace, in one of these the author imagined that he saw a dark spot in its lamp; it flew from east to north, crossing the Great Bear.

The Rev. G. Venables, at Broadwater Rectory, Sussex. Number of meteors counted by himself and a friend, standing north and south, between $11^h\ 35^m$ and $11^h\ 45^m$, was 610. The author was much impressed with the fact that some of the large meteors disappeared after a pretty straight course through a considerable space in the heavens, and reappeared perhaps 8 to 10 degrees further on, continuing the same course. Two other things impressed him; one was that the train is a *reality*, and not an optical illusion, such as might be produced by rapidly revolving a burning brand: the second was, that in the trains which continued a length of time a deflection occurred; he had noticed this before in the trains of ordinary meteors: the deflection was not curved, but rigid, just like a stiff stick broken in the middle.

The annexed diagrams were also received from the Astronomer Royal and from Mr. A. S. Herschel.

on Adams's calculations [illegible]

[illegible]

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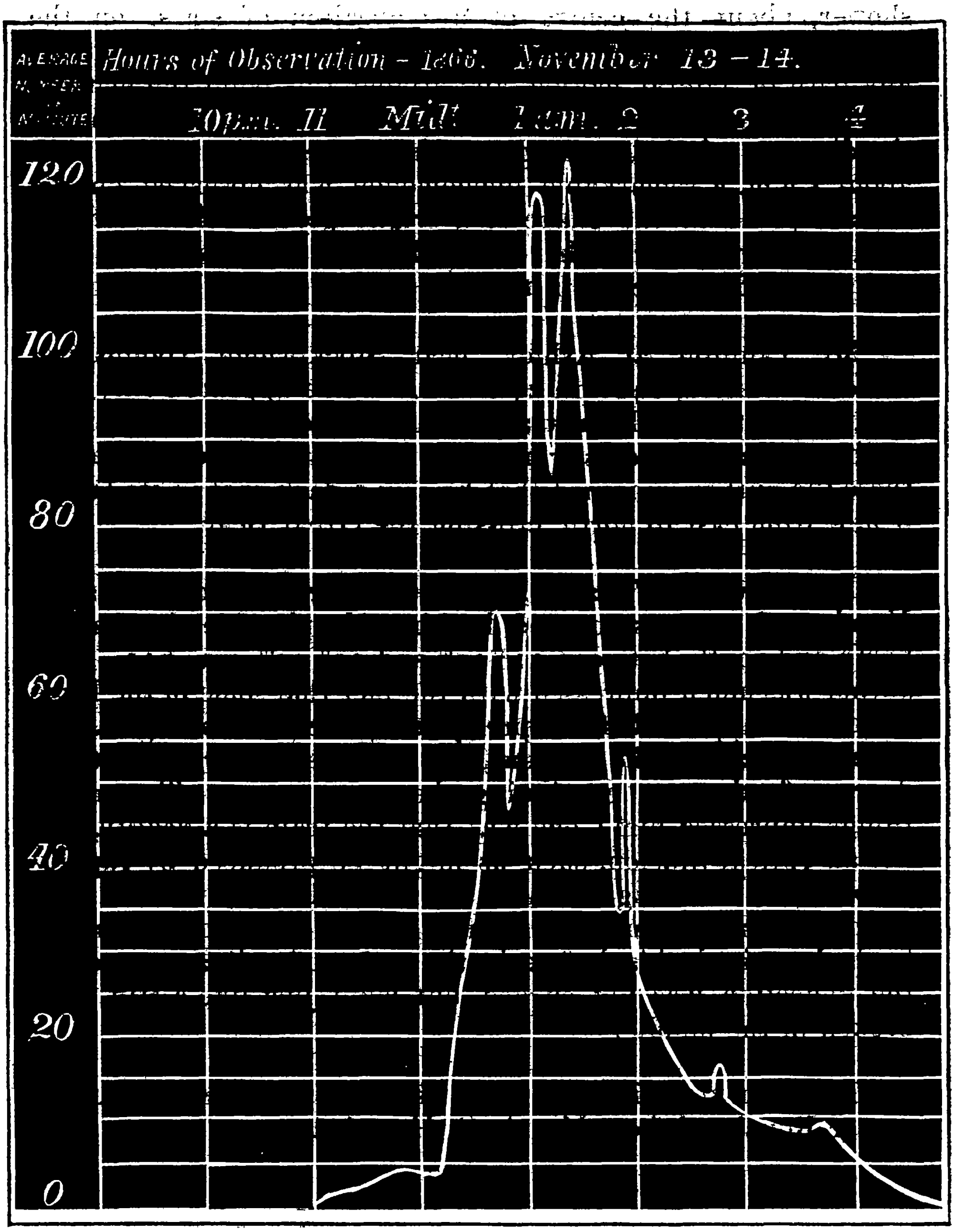
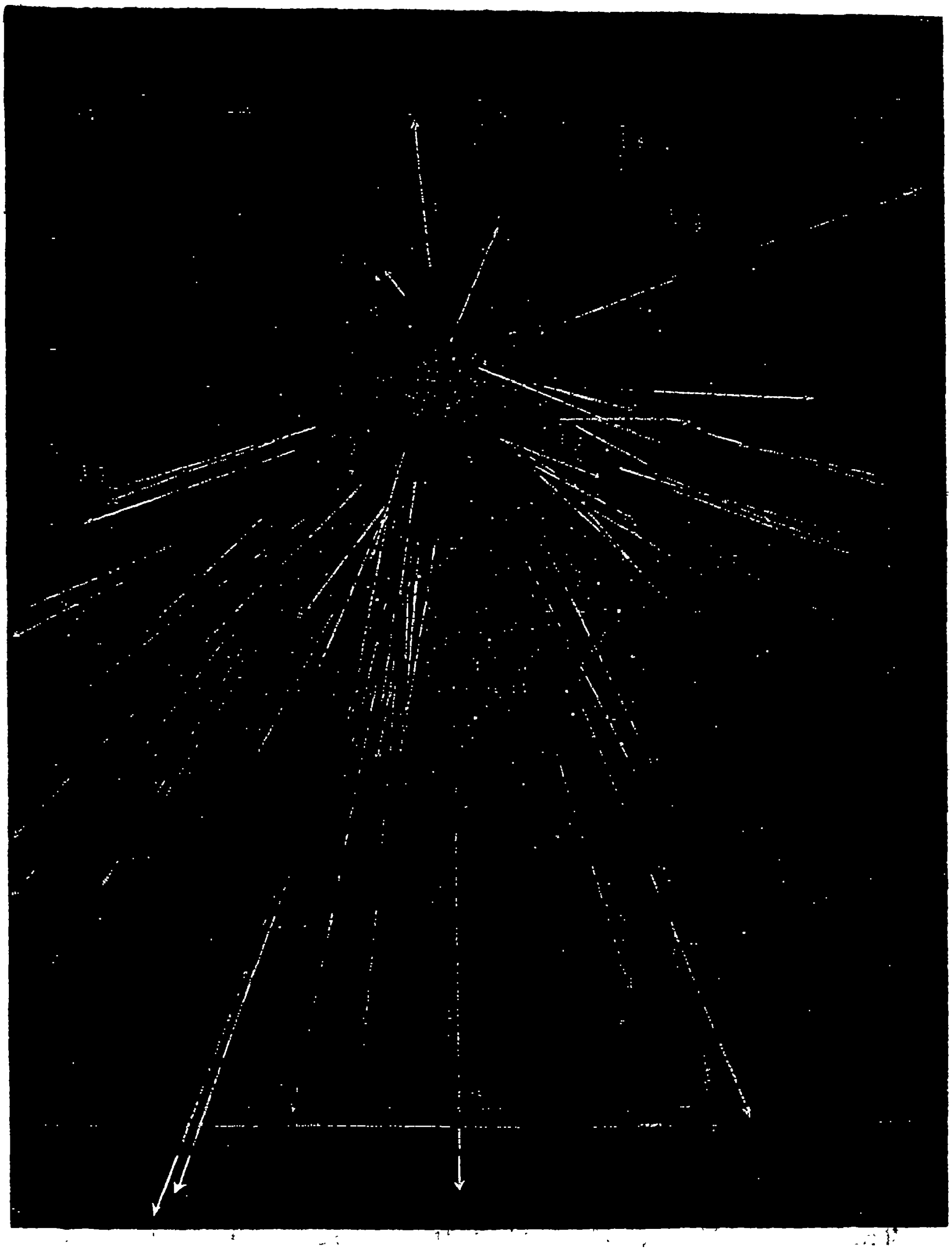
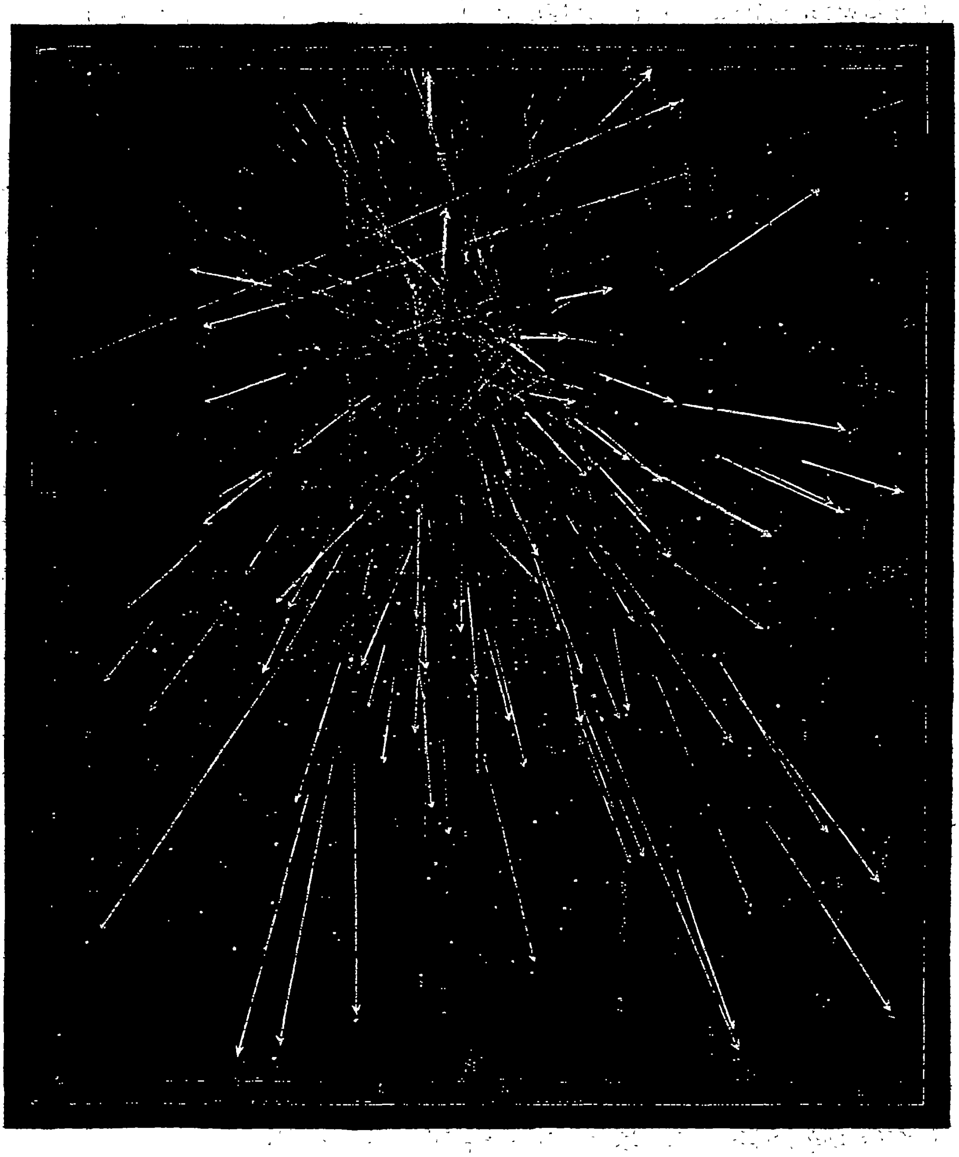


Diagram showing the Average Number of Meteors per Minute observed at the Royal Observatory, Greenwich, Nov. 13–14, between the hours 11 p.m. and 4 a.m.



Tracks of Meteors observed at the Royal Observatory, Greenwich, 1866, Nov. 13–14.



Tracks of 83 Meteors observed at the Observatory, Glasgow, 1866, Nov 14, $1^h\ 55^m$ a.m. to $3^h\ 40^m$ a.m. by A. S. Herschel and H. McGregor, showing the position of the Radiant Point in R.A. 149° N.D. 24°. N.B. A stationary Meteor, shown by a ✱, was seen very near the radiant point.